

## Existing Conditions

(Refer to **EXISTING CONDITION – VPDES FLOW PATHS drawing**)

### Ash Pond E (Outfall 005)

Ash Pond E accepts stormwater runoff, Metals Cleaning Waste Treatment Facility effluent (internal Outfall 501) by an open channel, decant from Pond D, and Oil Waste Treatment Basin effluent (internal Outfall 502) via a pumped forcemain. It discharges via a riser structure to permitted Outfall 005, which discharges to Quantico Creek.

- **Ash Pond D**

Ash Pond D contains a permanent pool of water (primarily stormwater from the surrounding drainage area) that is maintained at approximately 35-ft below the top of the dam. Ash Pond D is presently not accepting any process flows. The outfall is configured to discharge to Ash Pond E.

- **Metals Cleaning Waste Treatment Facility (Outfall 501)**

The Metals Cleaning Waste Treatment Facility consists of two (2) lined ponds. The ponds are used for batch treatment of boiler, preheater, and piping cleaning waters, among others. After treatment, the Metals Cleaning Waste Treatment Facility effluent is discharged to Pond E. Sludge is pumped out of the Metal Cleaning Waste Treatment Facility every 2 or 3 years (where is the MCWTF sludge taken for disposal?).

- **Oil Waste Treatment Basin (Outfall 502)**

The Oil Waste Treatment Basin accepts boiler blowdown, floor drains, cooling tower drift, stormwater, among other process waters. The treated effluent is pumped to Pond E. Treated oil waste is permitted to be directed to the Low Volume Settling Ponds on a temporary basis to Outfall 004.

### Ponds ABC (Outfall S104)

Ponds ABC presently receive surface runoff from approximately 44 acres of the plant site that are not associated with active industrial activity. The natural flow of the storm water upon entering the ponds is toward a decant structure located in Pond C. During wetter periods of the year storm water may pond behind the decant structure and, if sufficient storm water accumulates, may enter the decant structure and discharge to Quantico Creek through Outfall S104.

### Low Volume Waste Settling Basin (Outfall 004)

The Low Volume Waste Settling Basin current receives low volume wastewaters including Unit 5 cooling tower drift, yard drains, floor drains, Unit 5 circulating water, Units 1-4 sand filter backwash, filter purge, Unit 6 wash water, electrodialysis reversal (EDR) backwash, neutralization sump, and stormwater. Treated wastewaters are discharged through Outfall 004

## **Phase 1: Dredge and Close Ash Pond E Preliminary Pond ABC and D Dewatering and Grading**

*(Refer to PHASE 1 - DEWATER, DREDGE, CLEAR, GRADE, & CLOSE POND E AND PRELIMINARY DEWATER, GRADE PONDS D & ABC drawing)*

***Phase I of the project will include the following activities:***

- Dredging of solids from Pond E to Pond D
- Dewatering of Pond E
- Grading of material in Pond D
- Construction of temporary sediment basins associated with Ponds A, B, C and with Pond E
- Installation of temporary portable treatment system associated with sediment basin located within Pond E footprint
- Rerouting of Oil Waste Treatment Basin to Low Volume Settling Pond

***Phase I activities will affect existing wastewater discharges as follows:***

### **Outfall 005**

Solid materials from Pond E will be mechanically dredged and deposited in Pond D during the initial stages of Phase I construction. During this time, overflow/decant water from Pond D will be directed back to Pond E for treatment. After dredging activities have been completed, a temporary treatment system will be constructed at Pond E to ensure that discharges from Outfall 005 are in compliance with permit requirements. Dewatering wastewater from Pond E will be directed through this treatment system prior to discharge via Outfall 005.

Following the construction of a temporary sediment pond associated with the A,B,C pond area (see Outfall S104 below), contact stormwater from this pond will be pumped to the treatment system at Pond E prior to discharge via 005.

### **Outfall S104**

Prior to the commencement of construction activities at the A,B,C Pond Area, temporary sedimentation basins will be constructed to collect contact stormwater. Water collected in the sedimentation basins will be pumped to the temporary treatment system at Pond E for discharge via 005. There will be no discharge of contact stormwater from S104.

### **Metals Cleaning Waste Treatment Facility (Outfall 501)**

Metals cleaning wastes collected in the metals cleaning waste treatment facility during Phase I construction will be conveyed through the temporary treatment system and additional polishing prior to discharge via Outfall 005.

Possum Point PS CCB Pond Closures  
Sequencing Narrative for Construction Phases  
April 7, 2015 Station Meeting

**Outfall 004**

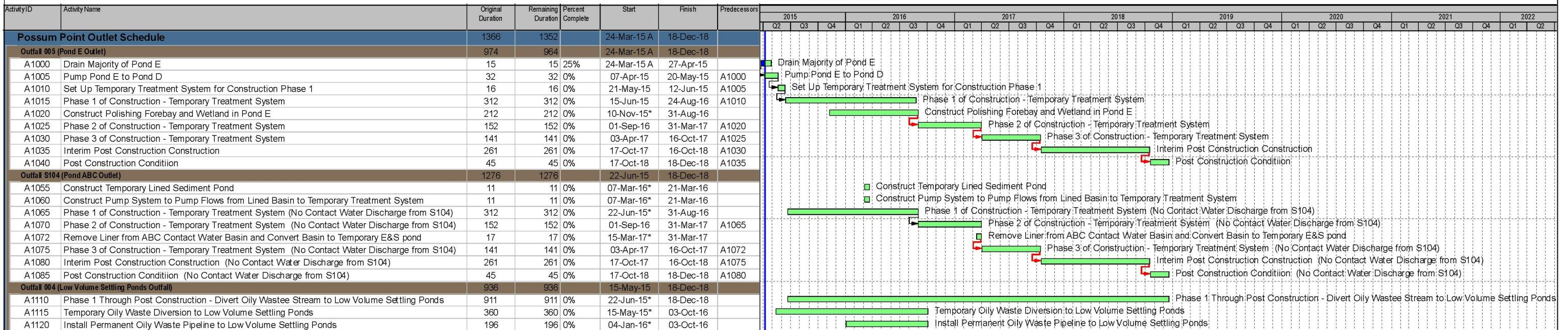
Beginning in the Phase I construction period, the discharge from the Oily Waste Treatment Basin will be diverted to the station's existing low volume settling ponds for discharge via Outfall 004. This diversion will continue until the post construction phase when the final discharge configuration is established.

**Oil Waste Treatment Basin (Outfall 502)**

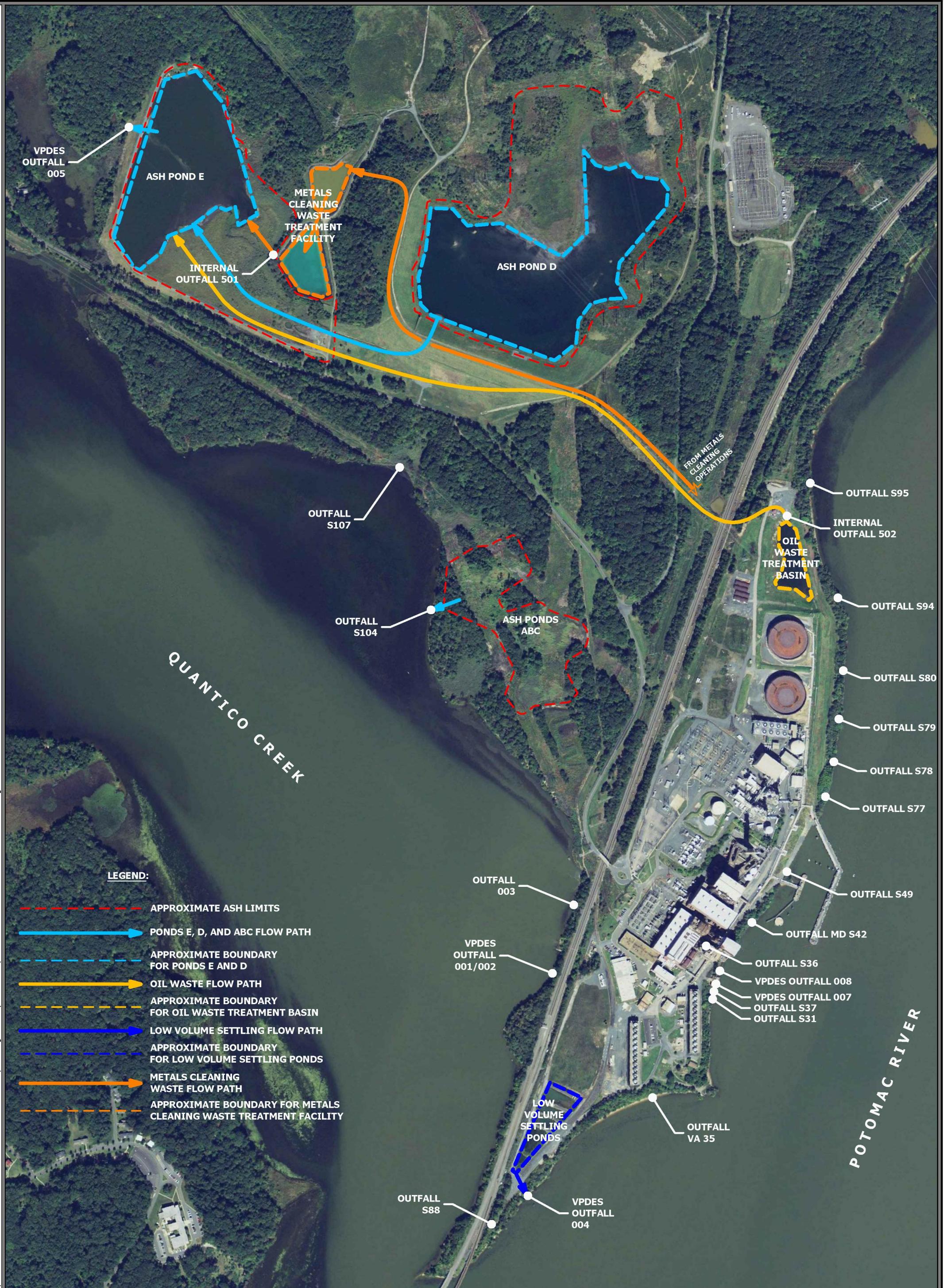
Discharges from the Oil Waste Treatment Basin will be rerouted to the existing Low Volume Settling Ponds where the combined wastewater will be discharged via permitted Outfall 004. WILL THE EXISTING PONDS REQUIRE DREDGING PRIOR TO INTRODUCTION OF THE OIL WASTE TREATMENT BASIN WASTEWATER?

DRAFT

## Possum Point Outlet Schedule



█ Actual Work    █ Critical Remaining Work  
█ Remaining Work    ◆ Milestone



DRAWING TITLE  
**EXISTING CONDITION - VPDES FLOW PATHS**

PROJECT

POSSUM POINT POWER STATION  
19000 POSSUM POINT ROAD  
DUMFRIES, PRINCE WILLIAM COUNTY  
VIRGINIA 22026



CLIENT

DOMINION RESOURCES SERVICE, INC.  
5000 DOMINION BOULEVARD  
GLEN ALLEN, VIRGINIA 23060

DRAWN BY: DEBARJD CHECKED BY: MONNEJD APPROVED BY: QUINLSC

DWG TYPE: SCALE: ISSUE DATE:

1" = 600' 04/02/2015

SHEET NO.: 1 OF 1

GAI FILE NUMBER:

C150132.00 - VPDES - EXISTING

GAI DRAWING NUMBER:

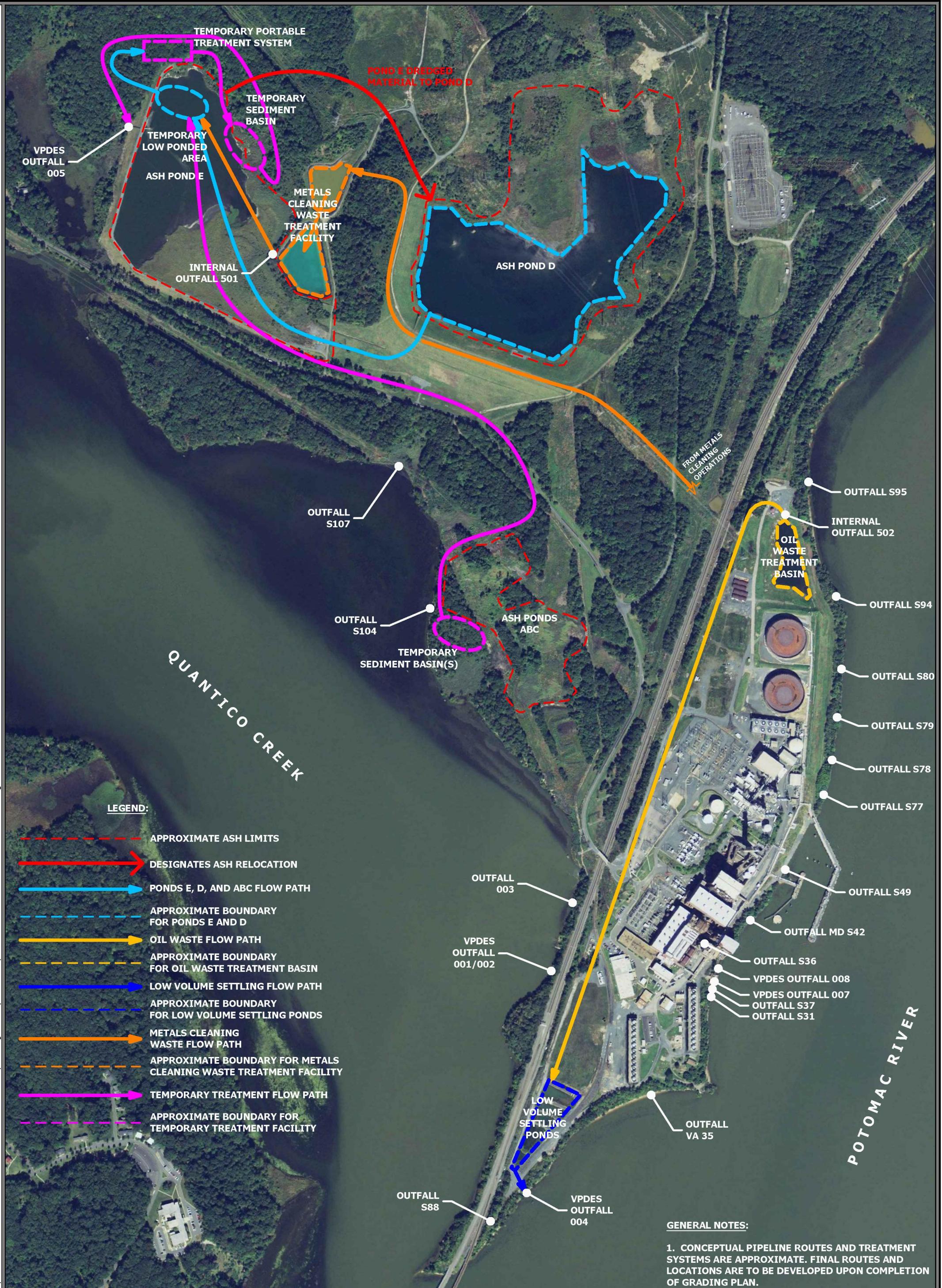
12x18 Existing

This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

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DRAWING TITLE			DRAWN BY:	CHECKED BY:	APPROVED BY:
<b>PHASE 1 - DEWATER, DREDGE, CLEAR, GRADE, &amp; CLOSE POND E AND PRELIMINARY DEWATER, GRADE PONDS D &amp; ABC</b>			DEBARJD	MONNEJD	QUINLSC
PROJECT		CLIENT	DWG TYPE:	SCALE:	ISSUE DATE:
POSSUM POINT POWER STATION 19000 POSSUM POINT ROAD DUMFRIES, PRINCE WILLIAM COUNTY VIRGINIA 22026	 gai consultants	DOMINION RESOURCES SERVICE, INC. 5000 DOMINION BOULEVARD GLEN ALLEN, VIRGINIA 23060		1" = 600'	04/02/2015
			SHEET NO.:	1 OF 1	
			GAI FILE NUMBER:		
			C150132.00 - VPDES - PHASE 1		
			GAI DRAWING NUMBER:		
			12x18 Dredge & Close E		
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